

IN THE CLAIMS

Please amend the claims as follows:

1. (original) Transmitter (Tx_1 , Tx_2) for simultaneously transmitting at least a first (s'_1) and a second (s'_2) signal, the first signal (s'_1) being modulated according to a first modulation constellation, the second signal (s'_2) being modulated according to a second modulation constellation, wherein the transmitter is arranged to pre-code at least the first signal (s'_1) through a modification of the first modulation constellation so as to prevent a correlation between the at least first (s'_1) and second (s'_2) simultaneously transmitted signals.
2. (original) Transmitter (Tx_1 , Tx_2) according to claim 1, wherein the pre-coding of at least the first signal (s'_1) comprises a rotation of the first modulation constellation through a first angle.
3. (original) Transmitter (Tx_1 , Tx_2) according to claim 1, wherein the pre-coding of at least the first signal (s'_1) comprises a change of the order of the first modulation constellation.

4. (original) Transmitter (Tx_1 , Tx_2) according to claim 3, wherein the pre-coding further comprises a change of the number of simultaneously transmitted signals (s'_1 , s'_2).

5. (original) Transmitter (Tx_1 , Tx_2) according to claim 1, wherein the transmitter is arranged to pre-code at least the first (s'_1) signal after receipt of a first signal from a receiver (Rx_1 , Rx_2) of the at least first (s'_1) and second (s'_2) simultaneously transmitted signals.

6. (original) Transmitter (Tx_1 , Tx_2) according to claim 1, wherein the transmitter is arranged to transmit a second signal to a receiver (Rx_1 , Rx_2) of the at least first (s'_1) and second signals (s'_2) in order to notify the receiver about the pre-coding of at least the first (s'_1) signal.

7. (currently amended) Transmitter (Tx_1 , Tx_2) according to claim ~~1, 2, 3 and 4~~, wherein the first and second modulation constellations are M-ary QAM modulation constellations.

8. (original) Receiver (Rx_1 , Rx_2) for simultaneously receiving at least a first (s'_1) and a second (s'_2) signal from a transmitter (Tx_1 , Tx_2), the first received signal (s'_1) being modulated

according to a first modulation constellation, the second received signal (s'_2) being modulated according to a second modulation constellation, in which at least the first received signal (s'_1) is pre-coded through a modification of the first modulation constellation so as to prevent a correlation between the at least first (s'_1) and second (s'_2) simultaneously received signals.

9. (original) Receiver (Rx_1, Rx_2) according to claim 8, wherein the pre-coding of the first (s'_1) received signal comprises a rotation of the first modulation constellation.

10. (original) Receiver (Rx_1, Rx_2) according to claim 8, wherein the pre-coding of the first (s'_1) received signal comprises a change of the order of the first modulation constellation.

11. (original) Receiver (Rx_1, Rx_2) according to claim 8, wherein the pre-coding further comprises a change of the number of simultaneously received signals (s'_1, s'_2).

12. (original) Receiver (Rx_1, Rx_2) according to claim 8, wherein the receiver is arranged to transmit a first signal to the transmitter in a response to which the transmitter is arranged to pre-code at least the first (s'_1) signal.

13. (original) Receiver (Rx_1 , Rx_2) according to claim 8, wherein the receiver is arranged to receive a second signal from the transmitter (Tx_1 , Tx_2) in a response to the transmitter pre-coding at least the first (s'_1) signal.

14. (currently amended) Receiver (Rx_1 , Rx_2) according to claim 8, ~~9, 10 and 11~~, wherein the first and second modulation constellations are M-ary QAM modulation constellations.

15. (original) Transceiver comprising a transmitter according to claim 1.

16. (currently amended) Transceiver according to claim 15, further comprising a receiver ~~according to claim 8~~ (Rx_1 , Rx_2) for simultaneously receiving at least a first (s'_1) and a second (s'_2) signal from a transmitter (Tx_1 , Tx_2), the first received signal (s'_1) being modulated according to a first modulation constellation, the second received signal (s'_2) being modulated according to a second modulation constellation, in which at least the first received signal (s'_1) is pre-coded through a modification of the first modulation constellation so as to prevent a correlation

between the at least first (s'_1) and second (s'_2) simultaneously received signals.

17. (original) Wireless device comprising a transmitter according to claim 1.

18. (original) Telecommunication system comprising a transmitter according to claim 1.